

**GIRLS' PARTICIPATORY LEARNING  
ACTIVITIES IN THE CLASSROOM  
ENVIRONMENT (GirlsPLACE)  
A View to the Experiences of Girls**

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**January 1998**

*Prepared for:*  
The U.S. Agency for International Development  
Africa Bureau, Office of Sustainable Development  
by  
The Institute for International Research  
Contract #: DPE 5836-Q00-1043-00

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## **ACKNOWLEDGMENTS**

We would like to give special thanks to the Ministry of Education and the USAID Mission in Malawi for graciously allowing us to pilot test the materials in this manual.

We would also like to acknowledge the assistance and advice that Robert Chambers provided in the modification of the PLA techniques that are included in this manual.



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## FOREWORD

This manual is a practical guide to empower classroom teachers to be able to *see* the gender interactions that occur in the classroom—to observe and be aware of events taking place, to reflect on the decisions they are making as well as on the exchanges between the boys and girls. This manual takes as its starting point the observation that changes for the better in the classroom environment for girls depend on teachers' roles as decisionmakers. Classroom decision-making is not easy and many teachers fail because they do not want to be successful or are not aware of what needs to be done. All too often they fail because they are *unaware of what occurs* in their classrooms and schools. They are so busy dealing with the details of running a classroom that they are unable to perceive the classroom as a whole.

In their roles as decisionmakers—planners, implementors, evaluators, and managers—teachers are in a position to foster change for the girls in their classrooms.

*Girls' Participatory Learning Activities in the Classroom Environment (GirlsPLACE)* offers a structured format to identify patterns of instructional interactions, motivation, management procedures, and student-to-student interactions. The observation guides are designed so that teachers may work in partnership with their school colleagues or circuit supervisors to identify what takes place in their classrooms. The PLA activities allow teachers and students to compare perceptions and attitudes about classroom experiences and interactions, and to identify problems and alternate solutions to factors that influence the classroom participation of boys and girls.



## THE PROBLEM

The enrollment rate for girls in primary schools in sub-Saharan Africa has dramatically increased since the early 1980s. Still, there are considerable differences in the learning opportunities available to boys and girls. Certain factors come into play that have an adverse effect on girls' performance, attendance, and participation in school. For example:

- # cultural beliefs influence teacher attitudes and behavior towards the girl student;
- # classroom interactions between girls and boys can lead to harassment and abuse of girls;
- # teachers and headteachers assign clerical and domestic responsibilities to girls in greater numbers than they do boys;
- # the curriculum and textbooks—even those proclaimed to be free of gender bias—continue to reflect dominant biases and distortion; and
- # poverty-related factors such as lack of instructional materials, lack of school uniforms, or inadequate clothing, temporary hunger, and need for child labor affect girls more than boys.

Gender analysis of coeducational classrooms in many African countries reveals a systematic bias by teachers against girl students. The teaching methods and styles present the first barrier to effective learning. Observed teaching styles encourage rote memorization and repetitious learning. This delays learning and places a premium on such aggressive behaviors as shouting and standing, to girls' disadvantage.

Evidence from research conducted in classrooms also shows that teachers' low expectations limit girls' potential to succeed in the classroom. Cultural beliefs that girls should be groomed for their future roles as mothers in a private, domesticated household influences teachers' attitudes toward the girl student. VanBelle-Prouty (1991) labeled the phenomenon of girls internalizing these expectations of their future roles as "an apprenticeship of marriage." These ideologies are carried into the classroom and are perpetuated by teachers who, for example, favor boys over girls, positively reinforce boys more, and punish assertive girls. They are also reinforced by male students who frequently assume dominant roles to the girls' submissive roles. (Another consequence is that boys' aggressive behavior undermines teachers' control of the classroom and encourages boys to assume superiority based solely on their gender.)

Girls also assume the lion's share of school chores, and step in to assume the responsibilities of boys when they fail to complete their tasks. The frequently observed pattern of teachers' assigning chores to girls has consequences far beyond the reduction of their learning time. It means that classrooms are structured in such a way that the girls' role is to provide support to the boys, freeing boys' time for learning activities. It is small wonder, then, that girls drop out more frequently than boys: the system is designed for this to happen.

Girls receive less attention in class and frequently are not given the opportunity to assert themselves intellectually. In cases where girls are assertive, they may be severely reprimanded for going against social norms. Under these conditions, boundaries set for girls discourage success and may even reward failure.

Research has repeatedly demonstrated that teachers interact more positively with boys than with girls. They are positively reinforced for their behaviors be they good or bad, such as teachers laughing along with boys who make negative comments toward girls. In southern Malawi, research has shown that both women and men teachers called on boys considerably more frequently than they called on girls (Davison and Kanyuka 1990). In a Nigerian level two class the teacher gave equal amounts of time to girls and boys in positive instructional interaction. By level six, however, the teacher's positive interactions with boys rose dramatically while positive interactions with girls had not changed. In contrast, negative perceptions of the boys had decreased while negative perceptions of the girls increased (Biraimah 1989).

In their review of classroom ethnographies Miske and VanBelle-Prouty (1996) consistently found that teachers believe boys to be more intelligent than girls, more willing participants in the learning process, and more aggressive in their learning. (See also Biraimah 1980; Davison and Kanyuka 1990; and VanBelle-Prouty 1993). Boys commanded and received more attention and help from their teachers. Girls, on the other hand, were perceived by their teachers to be less motivated, lazy, weak, with things other than school on their minds, and were believed to waste teachers' time.

Classroom observations indicate that indeed girls are often passive observers in the classroom, learning in a *secondary mode* of instruction that is targeted toward boys and their learning needs. A vicious circle is created in which girls internalize teachers' negative perceptions, disengage and perform badly in school, and thus further reinforce the stereotype that they are not worthy of the schooling investment.

Teachers' behavior and attitudes may contribute to the perception that girls are passive classroom members. VanBelle-Prouty (1991) reported repeatedly observing a teacher calling on the least capable girls to solve math problems on the blackboard. When the girls failed, he called on the most capable boys to solve the problem. The teacher then commented on the girls' lack of engagement with such statements as "You spend too much time trying to make yourselves

*Research in the United States spanning the last twenty years consistently reveals that boys receive more teacher attention than do girls. One reason is that boys demand more attention. One study showed that boys called out answers eight times more often than girls. When boys called out answers the teacher reaction was to listen to the comment. When girls called out, they were usually corrected with comments such as, "Please raise your hand if you want to speak." Even when boys do not volunteer, teachers are more likely to solicit their responses. It was also found that boys receive more useful teacher interaction—acceptance, praise, criticism, and remediation.*

—AAUW Report 1992, 68-79.

beautiful...to spend time on your math, but you aren't even smart enough to know how to make yourselves beautiful." Eventually the ritual would end with the boys joining in on the hazing. Needless to say, girls in this classroom tended to be passive learners and were frequently absent altogether.

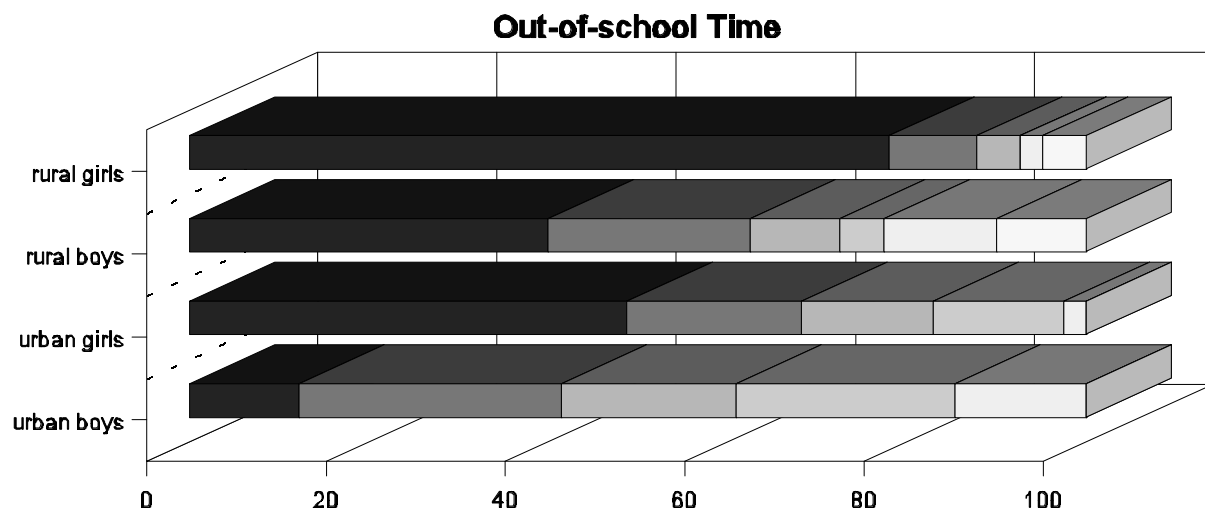
Although this is an extreme example, it underscores the link between the girls' learning style, level of engagement, and teacher reinforcement and support. Unfortunately, the debacle witnessed in this math classroom is not unique. Research has demonstrated that girls are frequently teased and harassed by male students and in some cases by their teachers, both male and female. In a classroom in Guinea, teachers ignored and even ridiculed girls. An observer witnessed a teacher say to a large girl in third grade "you are the grandmother of everyone here." When girls gave wrong answers, some teachers would respond with comments such as "scum," "imbecile," or "really, you are dumb" (Anderson, Bloch, and Soumare 1994). Similar comments were heard in Malawi: one male math teacher told a large girl who had given an incorrect answer to a question that she should go to the market and sell fish instead of being in class (Sey 1997).

In another study in Malawi, teachers linked girls' puberty to their lack of engagement and academic performance in school and noted that boys outperformed girls because of their immaturity at this age (Davison and Kanyuka 1990). Lang et al. (1997) found a similar attitude. Sey (1997) reported that a standard eight female teacher in a Malawi primary school said, "As soon as girls hit puberty, they go for the boy. We don't know who tells them, but it is as if they are glued to boys. That's all they think about, not school, not work, but boys." Another standard seven female teacher shared that "as soon as girls are mature, they lose interest in school because the natural step or stage in their life cycle is to be married; therefore, school is not a priority for them anymore."

But the attitudes and perceptions of teachers frame only a part of the emotional barrage that many girls must face. Other studies have drawn attention to how inappropriate the interaction between the boys and girls is (King and Hill 1993; Verspoor 1991; Wilkinson and Marrett 1985). Evidence from these studies shows that boys often make implicit or explicit threats to girls in the classroom and that girls must endure teasing, hitting, pushing, and shoving. Researchers conclude that these actions silence girls in the classroom. Numerous examples of this kind of controlling behavior were reported in Anderson et al. (1994) in Guinea. In schools across the research sample they found boys from the first grade on hitting girls on their bottoms and faces. They also saw boys blocking girls as they would try to move around the class or yelling at them "sit down," and "get out" when the girls tried to participate in class work.

In Malawi, research has shown that standard eight girls were mercilessly teased during their menstruation. If their clothing became soiled due to lack of sanitary pads, boys would make comments like "Oh, you're selling palm oil today." Boys would also make sexual innuendos to girls who were physically developed such as "You know men [you've had sex]; that is why you are so big" (Sey 1997).

Research shows that girls have less time than boys to devote to their studies. Both at home and at school girls are assigned more responsibilities. Teachers expect girls to sweep classroom floors, school offices, and the school compound. They must also fetch water and clean latrines—all tasks that are predominantly viewed as the domestic responsibilities of women and girls. Interestingly, as noted in Anderson et al. (1994), Sey (1997), and VanBelle-Prouty (1991) boys received chores as punishments that girls were routinely assigned as daily responsibilities. This sends strong messages about both the value of the tasks that girls were performing as well as the status that they had in the classroom. Girls not only had less time for studying, doing homework, and playing, but they had considerably less sleep as well—all factors that limit their participation in school and affect their academic performance. In fact, Sey (1997) found that rural girls received nearly two hours less sleep each day than urban boys. And in the rural areas, long after the boys in the village had gone to sleep, girls continued to perform their domestic labors. Yet, the girls were expected to arise at the same time as the boys each morning in order to work alongside them in the gardens and then fetch water and carry wood while the boys bathed and ate. The graph below compares rural girls' days from the time they wake up at 4:30 in the morning until they go to bed



at 9:30 at night, with those of boys in the village and urban girls and boys. The graph highlights the inequities that girls, especially rural girls, face in their daily activities.

## OVERVIEW OF THE MANUAL

The purpose of this manual is to provide a lens through which school inspectors, teachers, and students can better understand what goes on in classrooms. Teachers are often unaware of everything that students do in classrooms. Frequently, they must perform a myriad of competing tasks and are unable to reflect on the multitude of daily happenings in their classrooms, a phenomena that Jackson (1968) labeled “the press of the classroom.” Doyle (1986) identified five characteristics of classrooms that influence teacher behavior and engagement and define how ongoing activities press teachers to make quick decisions based on limited information and input. These powerful forces can counteract a teacher’s initiative to provide optimal learning opportunities to all students. Thus, it is important that teachers have an opportunity to “see” through someone else how these forces shape learning. These characteristics are:

- # *Multidimensionality*—different kinds of tasks and events that occur including record-taking, monitoring and evaluating of student work, pacing lessons, questioning students
- # *Simultaneity*—overlapping demands such as teaching a lesson and monitoring student comprehension while maintaining classroom discipline
- # *Immediacy*—rapid pacing of classroom events or the *here and now* of classrooms;
- # *Unpredictable and public classroom climate*—unanticipated events that are observed by other students
- # *History*—norms and understandings that influence what happens in classrooms such as the way that teachers develop expectations concerning the ability of individual students.

Teachers have a variety of beliefs that influence their teaching decisions and practices. Teachers who believe they influence student learning, or high-efficacy teachers, make decisions in ways that help students achieve learning goals. In contrast are teachers who believe they are powerless to influence student learning (low-efficacy teachers), are more likely to give up, have lower motivation, and thus have low expectations for their students. Students in their classrooms tend not to perform as well.

Sykes (1986) found that factors that influence teacher efficacy include:

- # the nature of the teaching/learning process;
- # the characteristics of children;
- # the nature of motivation;
- # the definition of subject matter (reading, math, science, etc.);
- # the purpose of discipline;
- # the goals of schooling;
- # the potential impact of a teacher on student; and
- # the role that school authorities play in making instructional decisions.

The observation guides and activities presented in this manual were developed to help teachers reflect on their teaching in order to become high-efficacy teachers. Reflective teaching is grounded in being able to make rational choices about what takes place in the classroom and to assume responsibility for those choices. To do this, teachers need to have a better understanding of what takes place in their classrooms. The activities and guides present concepts and frame questions that teachers or teacher-support staff can use to probe teachers' thinking and to reflect on the choices they are making.

*Girls' Participatory Learning Activities in the Classroom Environment (GirlsPLACE)* offers a structured format to identify patterns of instructional interactions, motivation, management procedures, and student-to-student interactions. The manual is organized into three parts. Part I introduces an observation guide with techniques that can be used in partnership with another teacher, head teacher, or inspector to observe what takes place in a classroom. The objective of observing the classroom is to identify patterns of interaction that will provide the basis for discussion. The classroom observation guide has been designed to deconstruct overlapping activities and capture histories and procedural tasks. Part II consists of Participatory Learning Activities,<sup>1</sup> exercises for teachers and students to take part in that can provide additional information about what occurs. Although these techniques and activities were designed to focus a wide-angle lens on what takes place in classrooms, they were also framed to highlight how gender differentiates the school experiences of girls and boys. By triangulating information gleaned from classroom observations and participatory research activities with both teachers and students, teachers may come to better understand the ways in which gender influences learning opportunities and, as a consequence, become more responsive to the needs of girls in their classrooms. Finally, throughout the manual are *Hint* and *Think* boxes highlighting information that may help observers and teachers consider what is taking place in the classroom or aid in the implementation of the techniques and activities presented in the manual.

It is as important to understand what this manual has *not* been designed to do as what it was designed for. Not included are guides or techniques to evaluate a teacher's performance, competency in the subject matter, or ability to present a lesson. Nor is there guidance on the evaluation of instructional materials or textbooks. The guide was developed to analyze interaction that takes place in the classroom, note instruction that is differentiated by gender, and identify gender-bound attitudes and perceptions that influence learning opportunities and achievement.<sup>2</sup>

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<sup>1</sup>The PLA activities used in this manual were modified from community participation and development materials designed by Robert Chambers, Joachim Theis, and Heather Grady.

<sup>2</sup>All guides included in the classroom observation section of the manual were designed by the authors.

## PART I: CLASSROOM OBSERVATIONS

Many of us have spent a lot of time in classrooms. But ironically, this makes it hard, perhaps especially for teachers, to see what is really happening in the daily routine of teaching and learning. Those just beginning to conduct classroom observations should begin by focusing on one discreet activity—to try to see it as if for the first time. As observers become more experienced, they can begin to note overlapping and simultaneous activities.

Developing routines and patterns simplifies note-taking. Recording when and where interactions are happening is a pattern that needs to be established at the start. The date of observation, the grade level and teacher's name should be noted each time observations are made. Pages should be numbered and dated to ensure that notes about ongoing activities are correctly sequenced. How much time is elapsing should also be noted in the margin. In most cases this can be done in five minute intervals.

Several examples of recording methods are included in this handbook to help observers systematize the recording of information. The method used to record or code the information should effectively differentiate between the experiences and responses of boys and girls and capture both positive and negative learning experiences. When recording what is happening observers need to be careful to *describe*, rather than *interpret*, what is taking place. For example, rather than write that a student is disengaged, observers should note that the student is looking out the window or drawing a picture in an exercise book while the teacher lectures.

Observations should occur in blocks of time sufficient to effectively and completely describe an interaction. Because of the intensity of classroom observation, observation periods should be broken into short blocks of time, varying the types of data collection, e.g., patterns of questioning, student use of instructional materials, group work, etc. Although observation periods must respond to the interactions taking place within a classroom and not stop in the middle of a particular interaction, twenty minute periods are often sufficient to allow an observer to develop data-rich classroom slices.

In this part of the manual, tables identify interactions and teaching/learning factors that influence what goes on in classrooms. Questions that relate to each issue are there to prompt the observer. These questions are not exhaustive, but they are representative of the types of questions that need to be considered as observation takes place. As observers become more adept and gain a better understanding of the kinds of patterns that occur, other questions may emerge for consideration. Although several guides have been included in the manual, the use of a guide can become cumbersome. Individuals using the manual are encouraged to explore ways to gather and record information both efficiently and unobtrusively. With experience, classroom observers develop their own style of note-taking and recording which works best for them.

### Action Zones

Action zones are the areas of the classroom where most interactions occur and where there are qualitative differences in the kinds of interaction that occur. Examples include:

- # Area where students are called on most frequently by teacher.
- # Area where majority of the instructional materials are located.
- # Area where more active students are seated.
- # Area where the teacher provides more assistance to students working on written assignments.
- # Area where teacher is physically located.

One of the basic tools for classroom observation is the classroom map. Maps are useful to both frame observations and serve as a recording instrument. A classroom map should be divided into four quadrants with the “front” of the classroom at the “top” of the map. Using a classroom map to capture data and interactions allows the observer to record *action zones* (see box), which reflect both the quality and quantity of interactions that affect instruction and learning opportunities.

The following illustration is a coded classroom map that identifies seating arrangements by gender, level of questions, and the teacher’s locus of instruction and movement patterns within the classroom.

### Coded Classroom Map

-----					
BB	BB	BB	BB     llhh + - - +	GG	GG
GG	G   h -	BB     llh + + -	GB	BG   h -	BB
BB	BB	BB	BB	BB    l +	GG    hl + -
BB   l -	BB	BB	GB	BG	GG

### Codes:

B/G: boy/girl

+/-: correct/incorrect answer

l/h: lower order/higher order question

-----: teacher's movement in the classroom

|||: no. times teacher calls on a student

## INSTRUCTIONAL INTERACTIONS

Factors that influence what goes on in classrooms are outlined in the following tables. The tables help observers consider what to look at and how to reflect on the patterns that they note. The tables were organized around guiding themes such as instruction materials or questioning patterns. The first column identifies specific areas to be examined such as textbooks or level of questioning. “Big picture” questions are included in the second column, followed in the third column by more specific questions. The questions are illustrative; many more could be framed depending on the focus of classroom observations and the kind of information that observers and teachers want to learn from what takes place in the classroom.

There are seven tables: *Instructional Materials*, *Lesson Presentation*, *Questioning Patterns*, *Motivation/Evaluation*, *Management Procedures*, *Physical Environment*, and *Student Behaviors*. Three guides are also provided: *A Sample Student Guide*, *Running Tabulation Guide*, and an *Activity Log*. Instructions are also provided on developing *Case Study Reviews*.

Instructional Materials			What is the teacher's rationale for his/her actions?
<b>Textbooks</b>	<p>#note subject area</p> <p>#note time of daily schedule when class is taught</p>	<p><i>#Who has a textbook/who doesn't? Does this appear to affect classroom interaction? How?</i></p> <p><i>#Are the students reading from the textbook?</i></p> <p><i>#Are the students copying from the textbook?</i></p> <p><i>#Is the teacher writing on the board from the textbook?</i></p> <p><i>#Is a summary being written from the book or a verbatim section copied from the textbook?</i></p> <p><i>#Are mistakes being introduced in the copying from text to board?</i></p>	
<b>Manipulatives</b>	Describe if they are not standard classroom instructional materials	<p><i>#What manipulatives are the students using?</i></p> <p><i>#Do boys use them more than girls?</i></p> <p><i>#Do all students have equal opportunity to use the manipulatives?</i></p> <p><i>#If girls are not participating what does the teacher do?</i></p>	
<b>Allocation of resources</b>	<b>Note on the map the locations where students have materials and note the gender of the students who have them.</b>	<p><i>#Are there differences in the quality of the materials some students are provided (materials that are damaged and hard to read or pages are missing, etc.)?</i></p> <p><i>#Do all students have the learning materials? If not, who doesn't have them and what is the ratio and representation by gender?</i></p> <p><i>#Do all students in the room have chalk and slates or pen, pencils and exercise books? If not, who doesn't have them and what is the ratio and representation by gender?</i></p> <p><i>#If instructional materials are passed out by students, who passes them out? Does this have any impact on learning opportunities or classroom interactions? If so, in what ways?</i></p>	

Lesson Presentation			What's the teacher's rationale for his/her actions?
<b>Modality of presentation</b>	Does the teacher use lots of examples that relate to the lives of the children?	<i># Is the teacher lecturing?</i> <i>#Is the teacher writing on the board—if so, can all students easily see what is being written?</i> <i>#Are the students doing seatwork? If so, describe.</i>	
<b>Wait time</b>	Count the seconds of wait time that the teacher gives to boys and girls when asking them questions. Are there differences in the time allocated?	<i>#When the students are unable to answer does the teacher rephrase the question or provide cues to the students? Does the teacher differentiate in the cues given to boys and to girls?</i> <i>#If cues are provided, what are they?</i> <i>#Does the teacher provide different amounts of wait time to students based on where they sit in the classroom? By gender? By whether or not the student is an active or passive learner?</i> <i>#Does the teacher provide cues or different cues to different students based on where they sit in the classroom? By gender? By whether or not the student is an active or passive learner?</i> <i>#What happens when the teacher increases wait time and gives the students more time to think about the answer?</i>	
<b>Locus of instruction</b>	Do girls take part in “secondary mode” learning?	<i>#Where does the teacher direct the majority of his/her questions to the students?</i> <i>#In what areas of the classroom does the teacher stand/walk?</i> <i>#Who does the teacher look at when s/he teaches?</i>	

Lesson Presentation			What's the teacher's rationale for his/her actions?
Time on task	Out of the overall lesson time, how much time is spent on transitions?	<i>#How much time does the teacher spend on a lesson?</i> <i>#How much of the lesson time is "teacher talk" and how much is "student talk"?</i> <i>#How much time of the lesson is spent having students do "seatwork"?</i> <i>#Approximately how many concepts are covered in one lesson?</i>	
Language	Writing  Speaking  Reading	<i>#Does the teacher speak the local language of the children?</i> <i>#How much of the lesson does the teacher talk in a local language?</i> <i>#What kind of exchanges take place in the local language, e.g., clarifying comments, directions, student feedback, praise/discipline?</i> <i>#What kinds of writing do students engage in, e.g., copying, creative writing, answering questions from the textbooks?</i> <i>#Do all the students take part in all the different kinds of writing assignments? If not, why?</i> <i>#What kinds of oral language activities take place in the classroom, e.g., choral readings, reading from textbooks or from the board, answering questions, creative storytelling?</i> <i>#Do all children use the official language of instruction in the classroom?</i> <i>#If not, do girls or boys use more metropolitan language or local language?</i>	

### WAIT TIME

Wait time is the length of time that teachers allow students to think about and to respond to questions. Most teachers allow students less than a second to respond. Research has shown that increasing wait time to three to five seconds results in significant improvements in student answers and risk taking. They have shown that increased wait time causes:

- # longer student answers;
- # more unsolicited responses;
- # more correct responses;
- # fewer incorrect responses;
- # more speculative responses;
- # increase in student-to-student comparison of data;
- # increase in higher order (levels two and three) thinking;
- # increase in student-initiated questions; and
- # greater variety of verbal contributions to lessons by students.

—Good and Brophy 1991, 482.

### Bloom's Taxonomy Levels of Questioning

**Level 1:** Literal Questions: *knowledge, comprehension*

Questions asking for information explicitly stated the text.

**Level 2:** Inferential Questions: *application, analysis, synthesis*

Questions asking for information that requires a reader to use background knowledge in conjunction with information explicitly stated in the text.

**Level 3:** Evaluative Questions: *opinion, evaluation*

Questions asking readers to make critical judgments about information in the text using previous experiences of values.

Questioning Patterns			What is the teacher's rationale for his/her actions?
<b>Level of Question</b>	<p>Bloom's Taxonomy_ (See box)</p> <p>Are there patterns in the level of questioning that the teacher uses on and boys?</p>	<p><i>#Are there differences in the level of questions that the teacher uses when questioning students?</i></p> <p><i>#What is the frequency of the different levels?</i></p> <p><i>#How does the teacher respond to incorrect responses—does s/he come back to students who made incorrect responses to clarify understanding and why answers were incorrect?</i></p> <p><i>#What level of questions does the teacher ask boys? Ask girls?</i></p>	
<b>Girls' participation_</b>	<p>Are girls more passive in their engagement and turn-taking than the boys?</p> <p>Are girls discouraged or even reprimanded for being active learners?</p>	<p><i>#Are there differences in whom the teacher calls on with higher level questions?</i></p> <p><i>#What differences are observable in the participation of students in both asking and answering questions?</i></p> <p><i>#Are there differences by gender who asks or answers questions?</i></p> <p><i>#Are there differences in the ability level of who asks or answers questions?</i></p> <p><i>#Are there differences in whom the teacher responds to when asked questions by the students?</i></p> <p><i>#What kinds of differences are observable?</i></p>	

## THREE LEVEL GUIDES

A three-level guide is a reading guide that directs readers through interlocking levels of comprehension. Three-level guides are excellent instructional tools, and are included in this manual to familiarize observers with the three levels of questions outlined by Bloom.

### Word Problem Reading Guide

*Problem:* Badou has collected 239 empty tin cans. He puts 107 into a big box. How many must he put in each of two smaller boxes if he uses the rest of the cans and puts the same number in each box?

#### Level I (literal)

Facts of the Problem

*Directions:* Read the word problem above. Then under column A check those statements that contain the important facts of the problem. Look back at the problem to check your answers. Under column B check those statements you think will help you solve the problem.

A (Facts)	B (Will help)	.
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	107 cans went into the big box.
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Badou had collected 239 empty cans.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Badou had one big box and two little ones.
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Badou needs to put the cans into three boxes.
<input type="checkbox"/>	<input type="checkbox"/>	107 cans had to be put into two smaller boxes.

#### Level II (inferential)

Math Ideas

*Directions:* Check the statements that contain math ideas about this problem. Look back to column B of part I to prove your answers.

<input checked="" type="checkbox"/>	Division is putting an amount into equal groups.
<input type="checkbox"/>	To find the total amount of a group we add the parts.
<input checked="" type="checkbox"/>	When we take an amount away we subtract to find the amount left.
<input type="checkbox"/>	Adding groups with the same amount in each group is multiplying.
<input type="checkbox"/>	Subtracting is separating a group into two parts.
<input checked="" type="checkbox"/>	When we put an amount into groups of the same size we divide the amount by the number of groups.

#### Level III (evaluative)

Numbers

*Directions:* Below are possible ways of getting an answer. Check those that will work in this problem. Look back to column B of part I and to part II to prove your answers.

<input type="checkbox"/>	$(239 \div ) + 107$	<input type="checkbox"/>	$107 \div 2$
<input type="checkbox"/>	$(239 - 107) \div 2$	<input type="checkbox"/>	$239 - 107$
<input checked="" type="checkbox"/>	$239 \div 2$	<input type="checkbox"/>	$107 + 239$

## MOTHER AND CHILD—ITSEKIRI

The Itsekiri people live in the Niger Delta and the women prefer to use imported, printed cottons for their dresses. They always select bright, hot colours such as red, purple, yellow and orange. While the choice of colours remains unchanged, particular attention is paid by the women to the patterns selected, a fact of which the manufacturers are fully aware. Usually they are bold in arrangement and such articles as telephones, ships, trains, flowers, animals and fish are produced in repeat patterns. The head cloth is of silk or some soft material tied over the head. The skirt is usually made in two pieces and reaches to the ankles. Mothers carry their babies tied tightly on their backs when traveling to the local market.

—*Nigeria in Costume*

### Level I (literal)

*Use what's in the text:* Read the lines.

Describe the dresses that Itsekiri women wear.

### Level II (inferential)

*Use what's in the text plus make them think with something beyond the text:* Read between the lines.

Why do you think manufacturers are aware of the dress of Itsekiri women?

### Level III (Evaluative)

*Make them think.* Read beyond the lines.

If only two manufacturers produce cloth for the Itsekire women, do you think that the women can be certain that they are getting the best product for their money? Why or why not—justify your answer?

Motivation/Evaluation			What is the teacher's rationale for his/her actions?
Feedback	<p>Form over substance</p> <p>Teaching to misconceptions</p> <p>Does the teacher's feedback send the message that the student can not do better?</p> <p>Is the message given that girls aren't as capable as boys in math and science</p>	<p><i>#Does the teacher make comments that focus on how things look over the correctness of the work?</i></p> <p><i>#Are there differences in the kind of feedback that boys get compared to girls?</i></p> <p><i>#When students give incorrect answers does the teacher explain why their answers are incorrect?</i></p> <p><i>#Are there observable differences in the kind of feedback that boys receive and the feedback that girls receive? If so, what are the differences?</i></p> <p><i>#Does the teacher use enabling feedback? If yes, do boys and girls receive the same level of enabling feedback?</i></p> <p><i>#Are there differences in the feedback that is given to girls based on subject matter, e.g., reading, science, maths, etc.)?</i></p> <p><i>#Does the teacher the teacher use personal comments when referring to the students, their work, or answers?</i></p> <p><i>#If the teacher uses personal comments, do they refer to the way the student looks? Are they used more with girls than boys?</i></p>	

Motivation/Evaluation			What is the teacher's rationale for his/her actions?
<b>Expectations</b>	<p>Are there patterns in who the teacher makes comments about?</p> <p>Do girls receive more negative comments from the teacher than boys?</p> <p>What kinds of patterns are observable in terms of students being chosen to assist one another?</p>	<p><i>#Does the teacher make negative comments to the students that talk about their ability to learn?</i></p> <p><i>#Does the teacher make comments about the kinds of work that the student should be doing such as selling food at the market, or being a fisherman, etc.?</i></p> <p><i>#Does the teacher make comments to girls that are sexual innuendos?</i></p> <p><i>#When girls make mistakes does the teacher encourage them to redo the work and discover where they made their mistakes? Or does the teacher just say wrong and move on to another student?</i></p> <p><i>#Does the teacher call girls to the blackboard to demonstrate how to do problems?</i></p> <p><i>#Does the teacher talk positively about the contributions of women?</i></p>	

*Students with teachers who use a lot of positive reinforcement or enabling questions perform better, are more active students, and take greater risks. Students with teachers who use negative reinforcement, respond to the **form** (what the work **looks** like) rather than the **substance** of the work (the **correctness**) or do not give feedback (instead of using enabling feedback when responding to incorrect answers), tend to be more passive in their turn taking and hesitant to respond to teacher questions. Teachers should never use personal comments about students or refer to personal attributes about students.*

Management procedures			What is the teacher's rationale for his/her actions?
<b>Discipline/punishment</b>	What amount of the teacher's time is spent managing boys' behavior?	<p><i>#Are boys given punishments of chores that girls are expected to perform daily?</i></p> <p><i>#Are girls expected to monitor the behavior of boys sitting near them?</i></p> <p><i>#Are girls reprimanded for behavior that is ignored with boys?</i></p> <p><i>#Are there differences in the punishments that are meted out between boys and girls for the same misbehaviors?</i></p> <p><i>#Are girls punished for calling out answers without raising their hands or standing?</i></p> <p><i>#Is corporal punishment used by the teacher (or doled out by the head teacher)?</i></p> <p><i>#Are students dismissed from classes as a punishment?</i></p>	
<b>Assigning tasks</b>	<p>What kinds of patterns do you notice in the responsibilities that are assigned?</p> <p>What percentage of the chores at school are performed by girls? By boys?</p> <p>Are students punished if they are unable to complete their assignments?</p>	<p><i>#Do girls care for younger siblings during school?</i></p> <p><i>#Are girls expected to care for the teacher's children during school?</i></p> <p><i>#What kinds of tasks are girls assigned?</i></p> <p><i>#What kinds of tasks are boys assigned?</i></p> <p><i>#Do girls have to leave class to complete chores?</i></p> <p><i>#Do boys do outside chores while girls do inside domestic-type tasks?</i></p> <p><i>#Do students have to come early to school and/or stay after school to complete school chores? Girls? Boys?</i></p> <p><i>#If boys do not complete their chores/tasks do girls have to assume their responsibilities?</i></p>	

Management procedures			What is the teacher's rationale for his/her actions?
<b>Procedural details</b>	<p>Are there differences in the leadership or responsible tasks that are assigned girls and boys?</p> <p>Do grouping patterns place boys in charge over girls?</p>	<p><i>#Who assists the teacher in clerical tasks such as taking attendance, collecting exercise books, etc.?</i></p> <p><i>#Does the teacher pick a student to assist in procedural tasks such as ringing the class bell, watching class, etc.? Who gets this job more often—girls or boys?</i></p> <p><i>#Do student grouping patterns that are used allow greater learning opportunities to girls or boys? (Can see or hear better, have more access to learning materials, have better/more comfortable seating and writing arrangements?)</i></p>	

Physical Environment			What is the teacher's rationale for his/her actions?
<b>Seating Patterns</b>	<p>Where are the action zones in the classroom?</p> <p>Create a cluster map of where the teacher stands and walks.</p> <p>Do single-sex or mixed-groups remain more engaged and stay on task better?</p>	<p><i>#Do girls sit in groups together? If so, where in the classroom do they sit—in the front of the room or near the back?</i></p> <p><i>#Do students sit at desks and chairs or benches? If not, do the seating arrangements allow girls to sit comfortably and discreetly?</i></p> <p><i>#Do the seating arrangements put girls at a disadvantage (boys can peer up their skirts, they can't see the board, etc.?)</i></p> <p><i>#Do some students sit at chairs and others sit on the floor or stones, stools, on mats, etc.? If so, who sits on benches/chairs? What is the ratio and representation by gender?</i></p> <p><i>#Are students seated in a way that all students can see the board? (Are there taller boys who block the view of shorter girls sitting behind them?)</i></p>	
<b>Normative issues</b>	<p>Is it an orderly and safe environment?</p> <p>What is the school's definition of "sexual" harassment?</p> <p>Are there school-level policies to protect girls from harassment and hazing?</p>	<p><i>#When boys threaten, tease, or harass girls, what are the consequences?</i></p> <p><i>#Are there rules that prohibit sexual harassment?</i></p> <p><i>#Do girls feel comfortable reporting sexual harassment by teachers or other students?</i></p> <p><i>#If there are no latrines at the school, what measures does the school take to ensure the girls' safety if they have to go to the bathroom away from the school grounds?</i></p> <p><i>#Are school personnel available if girls stay after school to clean the classrooms or compounds or complete other chores?</i></p>	

Physical Environment			What is the teacher's rationale for his/her actions?
Access to windows and doors	<p>Is the classroom comfortable and support learning?</p> <p>Are there differences from classroom to classroom in the same school?</p>	<p><i>#Do all the students in the classroom have access to lighting and ventilation?</i></p> <p><i>#Are classrooms stuffy and hot?</i></p> <p><i>#In rainy season, are the rooms damp and leaky?</i></p> <p><i>#Does dust, sand, or smoke come into the classroom?</i></p>	

### Active or Passive Engagement

Students who are *actively engaged* exhibit the following behaviors:

- # raise their hands high in the air to answer questions
- # ask the teacher questions
- # solicit the teacher's assistance when they do not understand
- # manipulate instructional materials
- # read in their textbooks or write in their exercise books
- # work with the other students
- # maintain their attention on school activities

Students who are *passively engaged* exhibit the following behaviors:

- # look out the window
- # watch on the sidelines as other students do learning activities (use manipulatives, take part in science experiments, read from the textbook, etc.)
- # timidly raise their hand to answer questions or not raise their hands at all
- # focus on activities taking place outside the classroom
- # daydream
- # ask very few questions or do not solicit help from the teacher

Just because students are passively engaged *does not* mean that they are not good students or unable to learn. In many cases the brightest students are passive learners.

Student Behaviors			What is the teacher's rationale for his/her actions?
<b>Passive behavior</b>	<p>Are girls more passive in their behavior than boys?</p> <p>Are girls engaged in "secondary mode" learning?</p>	<p><i>#Does the student raise hand timidly?</i></p> <p><i>#Does the student sit quietly in the classroom and not answer questions or take part in activities?</i></p> <p><i>#Does the student watch as others do the learning activities?</i></p>	
<b>Active behavior</b>	<p>Are girls reprimanded for active engagement?</p>	<p><i>#Does the student raise hand high and wave it in the air?</i></p> <p><i>#Does the student seek help when confused or doesn't understand?</i></p>	
<b>Resistance</b>	<p>Are students engaged in activities with the primary intent to derail the teacher and the lesson?</p> <p>Are girls more engaged in this kind of behavior or boys?</p>	<p><i>#Do students slowly get out books and delay beginning the lesson?</i></p> <p><i>#Do students wait until the teacher begins the lesson to indicate they don't have a book or other instructional materials that they need to complete the lesson or assignment?</i></p> <p><i>#Do students talk among themselves while the teacher is teaching or do other things to distract themselves and other students?</i></p> <p><i>#Do students protest when the teacher assigns homework or requests an assignment that is due?</i></p> <p><i>#If demeaning comments are made to girls, what is their reaction?</i></p>	

Student Behaviors			What is the teacher's rationale for his/her actions?
<b>Interaction between boys and girls</b>	<p>When girls are harassed or hazed by boys what is their reaction?</p> <p>When hazing or harassment by the boys occurs, what does the teacher do?</p>	<p><i>#Do boys verbally tease girls? If so, what kind of comments do they make?</i></p> <p><i>#Do boys block girls as they move around the classroom or play area?</i></p> <p><i>#Do boys physically touch girls? Hit them?</i></p> <p><i>#Do boys make comments to girls that are sexual innuendos?</i></p> <p><i>#Do boys make comments or laugh when girls say things in class or give wrong answers?</i></p> <p><i>#Do boys make comments about the physical development of girls?</i></p> <p><i>#Do indirect forms of verbal harassment occur?</i></p> <p><i>By whom against whom?</i></p>	

## GUIDES

*Elements of harassment in school include name calling, threats of physical violence, rumor mongering, isolation and alienation, theft of personal belongings, and physical abuse. Boys and girls typically harass others in different forms: Boys practice physical forms of harassment and girls practice indirect and verbal harassment.*

*Other examples of harassment include:*

- # sexual comments, jokes, gestures, or looks*
- # sexually explicit pictures, photographs, illustrations, messages, or notes*
- # sexual graffiti or notes about girls*
- # spying on girls when they dress, go to the bathroom or looking up their skirts when they stand to answer questions*
- # touching, grabbing, pinching , pulling at a girl's clothing, or intentionally brushing against a girl*
- # blocking or cornering a girl*
- # forcing a girl to kiss someone*
- # forcing a girl to do something sexual other than kissing*

*—Hostile Hallway 1991*

## METHOD 1: SAMPLE STUDENTS

This technique can be used to develop a composite of questioning and participation patterns in the classroom. The technique selectively tracks what happens to a group of students and provides information on the kinds or levels of questions that the teacher is asking, student-generated questions, and student engagement in the lesson.

### Steps:

1. On a piece of paper draw a rectangle to represent the classroom map. Divide the classroom map into four (4) quadrants.
2. Select two students—a girl and a boy—from each quadrant for a total of eight students.
3. In each quadrant, label a column for the girl and one for the boy.
4. Track what exchanges take place between the teacher and the eight students for a ten minute period.
5. Note which students of the eight have a textbook, exercise book, pencils, etc.
6. Repeat the activity as needed with eight different students.
7. Tally the responses noting who the teacher calls on, the kinds of questions that are asked, the level of student engagement and positive or negative feedback that the teacher gives.

### Coding symbols:

TQ1 = teacher asks a level 1 question  
 TQ2 = teacher asks a level 2 question  
 TQ3 = teacher asks a level 3 question  
 TF+ = teachers gives positive feedback  
 TF0 = teacher gives no feedback  
 TF- = teacher gives negative feedback  
 SPE = student passive engagement  
 G = girl B = boy

SA+ = student answers question correctly  
 SA- = student answers incorrectly  
 SQ = student asks a question of the teacher  
 SAE = student active engagement  
 b = student has a textbook

### Example of a coded classroom map for Sample Students:

	Quadrant 1		Quadrant 2		Quadrant 3		Quadrant 4	
	G	B	G	B	G	B	G	B
TEXT-BOOK								
TQ1								
TQ2								
TQ3								
TF+								
TF-								
TF0								
SPE								
SAE								
SA+								
SA-								
SQ								

TQ1—2

TQ2—3

TQ3—2      10 minute period

### Analyzing the Information:

# What kinds of patterns do you notice?

# Does the teacher call on students in one quadrant of the room more than another?

- # Does the teacher call on the boys more than the girls, girls more than the boys, or is there no difference?
- # Does the teacher give more positive feedback to the boys than to the girls?
- # Are all eight students actively engaged, are the boys more engaged than the girls, or vice versa?
- # Do the boys or the girls ask more questions, or do they ask the same number of questions?
- # Are there differences in the level of questions that the teacher asks boys or girls?
- # Do girls or boys have more textbooks, or is there no notable difference?
- # Does negative or no reinforcement from the teacher have an effect on the subsequent engagement of the student? If so, what do you notice?

***Hint:*** *If this technique is repeated until all students have been tracked, a composite will emerge of how the teacher interacts with the students in his/her classroom. Repeating this over time will allow you to note how consistent the teacher interaction is with individual students or groups of students.*

## METHOD 2: RUNNING TABULATION

Create a tabulation matrix like the one shown below to track the question and response exchanges that take place. Information gathered with this method allows you to note patterns in whom the teacher calls on, whether or not the teacher is prompting students into higher-order thinking skills, and the kind of feedback that the teacher gives students.

Level of Teacher's Question	Student Response	Gender of Student	Teacher Feedback to Student
1	T/C	B	+
1	S/I	G	✓
2	T/C	G	+
3	T/I	B	E
2	T/C	B	0
1	S/C	B	P

### Steps:

1. Create the table to track the exchanges that take place between the teacher and students.
2. For each question the teacher asks note the level in the first column.
3. In the second column indicate whether the student was called on by the teacher by noting a T or S if the student called out the answer.
4. In the second column indicate whether the student response was correct (C) or incorrect (I).
5. Note the gender of the student, B or G, in the third column.
6. In the fourth column note the teacher's feedback to the student (see coding).
  - # If the teacher gives positive reinforcement such as, good try, good effort, correct, OK, good job, yes, that's fine, thank you, etc., place a + in the space.
  - # If the teacher gives negative reinforcement, such as, no, sit down, incorrect, etc. place a ✓ in the space.
  - # No response from the teacher (for instance, the student gives an answer—correct or incorrect—and the teacher moves on to another child without commenting) should be noted with a 0.
  - # Form over substance comments such as “It looks very nice,” or “Your handwriting is very good,” or “You’ve done a neat job,” should be noted with a 0.

- # Enabling comments such as, “Why did you give this answer?” or “Can you explain how you got this answer?” or “Can you show us your work?” or “Go back and check your work,” etc., should be noted with an **E**.
  - # Teacher feedback to student responses that focus on personal attributes of the student such as, “You’re too big to be in this classroom,” or “Can’t you read that?,” or “Are you blind?” should be noted with a **P**.
7. Tally the scores at the end of the observations period. Take particular note of level of questions being asked and teacher feedback.

**Analyzing the Information:**

- # Look for patterns in teacher feedback. Do girls receive less, or more negative, feedback?
- # Does the teacher tend to use higher-level questions with boys more than girls?
- # Do boys give more correct answers than girls?
- # Do boys call out answers more than girls?
- # Does the teacher use enabling feedback to prompt students to try harder (and send the message that they can do better)?
- # Do boys or girls get more enabling feedback than girls?

## ACTIVITY LOG

An activity log provides information about the kinds of activities that take place in a classroom over a period of time and how frequently activities occur. The log also allows the observer to determine the frequency in which boys and girls are involved in each of the different activities.

Categories of activities are classified in the matrix. Additional categories of activities can be added as needed. The observer should track the activities that take place in the classroom for at least one class period (a math lesson, a reading lesson, etc.). Doing this in different classes (math vs. reading or science vs. reading) can point out passive/active learning differences that occur between boys and girls. Note the time that you begin and end an activity log.

Chores	Student Turn-Taking	Discipline	Seatwork
Cleaning: <i>washing windows, cleaning latrines, sweeping classrooms, sweeping compound, emptying garbage, cleaning backboard, cleaning dusters</i>	Asking questions	Cleaning: <i>washing windows, cleaning latrines, sweeping classrooms, sweeping compounds compound, emptying garbage, cleaning backboard, cleaning dusters</i>	Writing in exercise book
Clerical: <i>taking messages to office, taking attendance, taking charge of room when teacher is not there</i>	Responding to questions	Corporal punishment: <i>caning, beating, digging holes,</i>	Reading from text
Agricultural: <i>hoeing, weeding, watering</i>	Writing on blackboard	Running errands	Working in groups
Running errands: <i>fetching water, carrying wood</i>	Reading orally from text	Staying after school	
	Taking part in an activity/experiment	Working in the school garden	

	Tasks	Five minute blocks of time											
<b>Chores</b>	<b>Clerical</b>	B		G									
	<b>Agricultural</b>				G								
	<b>Running errands</b>		B										
	<b>Cleaning</b>	G			G			G		G			
<b>Student turn-taking</b>	<b>Asking questions</b>	B			G								
	<b>Responding to questions</b>	B	B B	G		G							
	<b>Reading orally</b>	G		B					G				
	<b>Writing on blackboard</b>		B		B		B						
	<b>Doing an activity/experiment</b>				B								
<b>Seatwork</b>	<b>Writing in exercise book</b>												
	<b>Reading from textbook</b>												
	<b>Working in groups</b>												
<b>Discipline</b>	<b>Cleaning</b>			B						B			
	<b>Staying after school</b>												
	<b>Corporal Punishment</b>						B						
	<b>Running errands</b>												

Each time a girl or boy does one of the activities identified on the matrix, mark a B (boy) or G (girl) in one of the boxes in that line. For instance, if a girl is asked to clean the blackboard, write a “G” on the line labeled “cleaning” under “chores.” Tally the total for each category to find out how gender factors into classroom activities.

#### Analyzing the information:

- # Are there certain kinds of chores that girls or boys tend to do more? If so, what?
- # Are chores that girls are assigned on a regular basis given to boys as punishments?
- # Who assumes the greatest percentage of the chores? (If there are more boys in the classroom than girls, the greater number of boys needs to be taken into consideration.)
- # Are there differences in the number of times boys or girls are called upon to answer questions or do work on the board?

## CASE STUDY REVIEW

Case study reviews provide an opportunity to get a more in-depth understanding of the specific situation of individual students in a classroom and to identify what factors influence their learning opportunity and achievement. Although the student selected for a case study review may not necessarily represent the situation of all students within a certain group (for example, what is learned from one girl's case study may not represent the situation for all girls in her classroom), the chances are that what is learned will benefit most of the students within that group. Case studies that compare and contrast the classroom experience of two or more students can be extremely valuable.

Select the students from the classroom to observe more closely. Observations to take note of include:

- #Student questioning patterns—frequency and nature (see annex) of questions that the student asks the teacher; frequency and “correctness” of responses to teacher questions.
- #Social interaction with other students of same sex, with students of opposite sex; with teacher; with head teacher.
- #Passive or active engagement in classroom activities—do they raise their hands for help; do they approach other students for help; do they use their textbook or other instructional materials; do they work independently at their desk (how long?); do they complete assignments?
- #Student activity zone—where they sit, where they move around in the classroom, where they move around in the play area.

Through the collection of materials and interviews, develop a portfolio for each student that takes into consideration the following questions.

- #Areas of interest particularly in terms of school work; subjects that bore them.
- #Physical characteristics.
- #Background information such as socio economic class, ethnicity, religion, etc.
- #Collect copies of their work.

## Example of a Case Study:

### **JULIANNA**

*Julianna attends a rural primary school in a tropical forest area accessible only by foot about three miles from a passable road. Inhabitants in the area are mostly migrant farmers from the Eastern Region. However, there are also Ewes and Fantis, which creates a complex ethnic and language mix in the community and school. When Julianna was in level 4 she was identified by her teacher and her performance as a high-performing child in her class. At that point, she could copy letters but could not write her name or read more than two or three words from English textbooks for levels 2-4. Classroom observations indicated that she did not have an exercise book or paper to write on. The following year, when she was in level 5, she was observed to have an exercise book (which she used 18 percent of the observed time). She was able to write her name and twenty-two other words. She was able to read about half of the words in passages from her textbooks but was unable to answer any of the comprehension questions. Julianna was tested again shortly before the end of the primary cycle (level 6). She could decode and pronounce about 80 percent of the words in the reading passages taken from textbooks for levels 2-6 but her comprehension was still very low, especially for the upper level passages. While being interviewed, Julianna pulled out a book from the school library and proudly read to the interviewer as she pointed to each word. However, when Julianna was asked about her English lessons, she reported that the class spent most of the time working on Unit 1. With only a few weeks left in the school year, the class was still working on Unit 4 (out of thirty units). Julianna's English textbook was badly water damaged but still usable. As she described her strategies for learning, it was clear that she used the book both at home and school. Julianna reported that she is helped to learn English by her parents and older siblings, which her father confirmed in an interview. He said that they made extra assignments for her to do at home.*

—*The Quality Link*, Winter 1997 (6): 15  
The Improving Educational Quality (IEQ) Project

## SCHOOL PROFILE

Name of School Community\_

	Number of Students by Grade Level		Number of Teachers by Grade Level		Student Age Range by Grade Level		Average Age of Students by Grade Level	
	Boys	Girls	Men	Women	Boys	Girls	Boys	Girls
1								
2								
3								
4								
5								
6								
7								
8								

*School Characteristics* (Check Appropriate Response)

Yes    No

Urban    Semi-Rural    Rural    Remote  
 Distance in Km to nearest road \_\_\_\_ (tar    dirt    )  
 Walls: Mud    Cement    Brick    None  
 Roofing: Tile    Tin    Thatch    Asbestos    None  
 Water Source: Tap Stream    Carried    None  
 Library: Yes    No    Number of Books: \_\_\_\_\_

Secure Doors:  
 Secure Windows:  
 Telephone:  
 Photocopier:  
 Typewriter:  
 Electricity:

## **SCHOOL MAP**

### **DRAW A MAP OF THE SCHOOL BUILDINGS AND PLAY AREA:**

(Indicate playground, water source, latrines, trees, classrooms, etc.)



## **PART II: PARTICIPATORY LEARNING ACTIVITIES**

### **THE BASICS**

Over the past decade, there has been a growing awareness of the value of Participatory Learning Activities (PLA). The failure of conventional development approaches to meeting the needs of resource poor people has led to the exploration of alternative methods of investigating, planning, implementing, and evaluating development initiatives. PLA offers a creative approach to information sharing and a challenge to persistent biases and preconceptions about local peoples' knowledge.

First defined by Robert Chambers as Rapid Rural Appraisal (RRA), participatory approaches to developmental research such as PLA are a method for learning about rural life and conditions from rural people themselves. But PLA is more than just learning. It extends into analysis, planning, and action. PLA has several critical features. One is that it is a form of information gathering that allows local people to share and analyze information about their lives and conditions, and to plan, act, and find ways to improve them Chambers (1991). Secondly, the time frame used to gather and analyze information and identify solutions is considerably compressed compared to more traditional forms of research. PLA was originally designed to collect agricultural data, but has since been adapted for other sectors and areas including health, urban community development, poverty, and education (see Robinson 1993; Kane 1994; Johnson 1995).

PLA offers an alternative way of creating behavioral and attitudinal change and offers a creative approach to information sharing. The key assumption around which all PLA activities have been designed is to validate the knowledge that people have about their own lives. Therefore, PLA utilizes research methodologies framed on the theory that data gathering, identification of problems, and the generation of potential solutions should actively include those whose lives are the subjects of research. PLA emphasizes cost-effective tradeoffs between quantity, accuracy, relevance, and timeliness of information. It combines a range of methods for rapid and cumulative data collection. The production of knowledge and the generation of potential solutions are all carried out by the local people.

PLA methods utilize a variety of methods including field-based visualization, interviewing, and group work techniques that advocate and promote interactive learning, knowledge sharing, and flexible structured analysis. These techniques have been valuable for understanding local perceptions.

## THE METHODS

Examples of PLA that can be used in the classroom are listed below.

*Focus group discussion*

*Venn diagrams*

*Preference ranking and scoring*

*Criteria matrix*

*Classroom mapping*

*Daily activity profile*

*Seasonal calender*

*Transect walks*

*Flows and causal diagrams*

*Pie charts*

When implementing PLA in the classroom, not all exercises need to be used. Teachers and students can choose from the menu of techniques as their needs dictate. For instance, if they are interested in determining how students spend their day, they may want to use a daily activity profile, pie chart, or focus group discussions. A seasonal calender, flow and causal diagram, or criteria matrix might be more useful to determine factors that influence their learning and achievement in school and ways to improve student achievement. As the teachers and students become more adept at using the techniques, they may decide to adapt them in order to get the information they want—this happens frequently as individuals become more experienced with PLA. In order to implement PLA no special materials are needed. Most of the exercises require only paper and markers. Many can be conducted outside, in group settings, drawing on the ground using local materials such as sticks, stones, leafs, empty tins, beads, seeds, etc.

The PLA exercises have been adapted to allow teachers and pupils to analyze problems they face in the classroom environment and to identify possible solutions. For example, if teachers want to find out whether they call on boys more than girls, one technique is to use a sort whereby the same number of seeds are distributed to all the pupils. Each time the teacher calls on a pupil, the student puts a seed aside. At the end of the class, seeds are tallied to determine gender percentages. This activity could be followed by a focus group discussion or flow and causal diagram to determine what factors influence whom a teacher calls on and student participation patterns. It would also provide a framework to discuss what can be done to change teacher questioning and student participation patterns.

Instructions on how to implement each activity are included in the next section of the manual. Detailed steps outline what the teacher must do to implement the activity. Materials that will be needed are listed, and the basic amount of time it will take to conduct the activity is noted. Probing questions that should be considered while the activity is being implemented and as the information generated by the activity is being analyzed, are included with the activity description.

## Activity: Seasonal Calendar

**Time: 1 hour**

A seasonal calendar highlights the main activities, problems, and opportunities that occur throughout the annual yearly cycle. It helps identify the months of greatest difficulty and vulnerability in terms of student health, and access to and participation in school.

### What information a seasonal calendar can reveal

Kinds of Seasonal Calendar	Information gathered
Seasonal calendars can be used to identify the different kinds of work done by boys and girls during the different seasons.	#Agricultural work done during different seasons and its effects on the schooling of girls. #The multiplicity of work girls engaged in as well as the severity of work burden during different seasons, for example, <i>in Malawi in the rainy seasons, girls in the rural areas work on their parents' farms planting and transplanting, weeding, hoeing, watering, and digging. They also help do domestic chores including, laundry, cooking, running errands, selling on roadsides or in the markets, collecting wood and water, etc.</i>
Gender-differentiated workloads and time spent completing tasks based on seasonal changes.	#Identifies periods when girls engage in different activities, such as leisure time, homework, or studying. <i>Other examples include, before school—farm-work, afternoon—selling in the market, evening chores include gathering wood, cooking, cleaning, etc.</i>
Identifies how climate during the different seasons of the year affects pupils learning and participation.	#Generate rate of absenteeism and lateness based on the condition of the weather, amount of lateness during different seasons and reasons for being absent or late. <i>Example, during the rainy seasons, poor infrastructure in school environment such as leaking roofs, broken windows, lack of doors in classrooms causes pupils to be wet.</i> #Because of the lack of chairs, pupils sit on hard cold cement floor with barely enough clothing. #Poor roads and unpaved roads become slippery during the rains, and they get wet and dirty. Girls get teased for being dirty. #In dry seasons, humidity creates unfavorable conditions in the classroom due to large class size and close proximity among pupils. #Kinds and availability of foods available to eat.
Identifies traditional and religious ceremonies that may lead to absenteeism.	#Determine seasons for ceremonies and the effect it has on pupil school lives. <i>Example, how do initiation ceremonies affect attendance for girls? How do religious beliefs such as fasting affect performance?</i>
Identifies diseases.	#The different kinds of diseases affecting pupils based on the seasons, and how it affects their attendance, performance, and participation.

## **How to make a seasonal calender**

A seasonal calender can be drawn on the ground. Sticks, stones, leaves, empty tins, beans, or almost any locally available item can be used for symbols. The seasonal calender can also be drawn on large pieces of paper using pencils, pens, colored pencils, and markers to fill in different activities. A twelve or eighteen-month calender is drawn to capture the different dry and wet season cycles. The calender does not have to start in January but needs to reflect the various seasonal cycles. Two methods of conducting a seasonal calender are possible: the matrix calendar and the time line calendar.

### **Steps**

1. Divide pupils into groups. Create separate groups for girls and boys, each group consist of no more than twelve to fifteen students.
2. Briefly explain what a seasonal calender is.
3. Ask each group to select one student to draw the chart. Lines can be drawn on the ground using sticks or on the paper that represents the months of the year and the rainy and dry seasons. Students can take turns drawing to maintain the interest level. (See example below of a seasonal calender.)
4. Pupils can use locally available items to symbolize the seasons. For example, a pile of white beads could symbolize months in the rainy season, and yellow beads to symbolize months during the dry season.
5. To identify labor patterns, ask pupils to discuss the kinds of work they do during different seasons and use symbols to represent this work. For example, in the rainy season, girls might plant, transplant, or weed. Any local material can be used as symbols to represent their work. Symbols that represent the different kinds of work done are placed in the month in which the work is done.
6. If the chart was drawn on the ground and it needs to be saved, transfer it to paper.
7. Ask probing questions to find out the different kinds of work that girls and boys do.

Example of seasonal calender:

## RAINY SEASON

November	December	January	February	March	April
<b>LABOR</b>					
Digging and Planting	Transplanting	Weeding & applying fertilizers	Weeding & applying fertilizers	Weeding	Stocking & Harvesting
Maize & Tobacco	Cassava	Beans			

## DRY SEASON

May	June	July	August	September	October
<b>LABOR</b>					
Clear land (both boys and girls)	Make ridges	Plant seeds	Marketing; build houses (girls collect thatch & fetch water; boys build)	Marketing; build houses	Marketing; build houses
Maize & Tobacco	Cassava	Beans			

J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C
Problems for School Girls											
Rainy Season Lack of money for school fees Poor Infrastructure Lack of Transportation Dirty, unpaved, slippery roads Girls are teased when they fall on the roads. Weather conditions result in lateness and absenteeism					Dry Season Food availability Diseases Weather Conditions: Too hot to learn Close proximity seating in classrooms increase disease transmission. Workload Time availability: For play, sleep, school work or chores.				Rainy Season Workload Food Availability Health Problems Diseases		

Another example of seasonal calender:

**Hint:** Working outside and on the ground is fun and exciting. Students love the high level of interaction and communication. As a diagram is being done on the ground, every one gets to see the visual picture and changes that are made as objects are moved as discussions proceed.

### Using the information gained from a seasonal calendar

Issues	Questions:
Chores/tasks	<ul style="list-style-type: none"><li>#What are the busiest months?</li><li>#What tasks do you do then?</li><li># What is the next busiest month?</li><li>#What tasks do you do then?</li><li>#What are the differences in kinds of tasks that boys and girls are asked to do?</li><li>#What are the differences in the amount of chores and tasks that boys and girls are required to do?</li></ul>
Climate	<ul style="list-style-type: none"><li>#What kinds of food do you eat during different seasons?</li><li>#How much food do you eat during different seasons?</li><li>#What ways do eating patterns affect your school participation?</li><li>#Are there times of the year when you are more hungry than others?</li></ul>
Diseases	<ul style="list-style-type: none"><li>#How do the seasons affect walking to school?</li><li>#What diseases are there during the different seasons?</li><li>#Are you more sick during one season than another?</li><li>#When other people in your family (mother, father, sisters, brothers) are sick, does this affect your school attendance? How?</li></ul>

**Activity: Daily Activity Profile****Time: 50 minutes**

A daily activity profile collects information about the daily activities of students. It allows you to compare the daily patterns between different groups of students. It is possible to discuss both the types and distribution of workload throughout the day. Daily activity profiles are useful to identify time constraints and hidden time that can be used for homework and study.

**Information from daily activity profiles highlight:**

- # daily labor patterns at school and at home;
- # distribution of work load and amount of time spent on chores, etc. throughout the day;
- # house tasks/chores are differentiated by gender;
- # timing of activities;
- # overlapping job responsibilities;
- # differences in personal eating and sleeping patterns; and
- # amount of leisure, play and study time.

**How to make a daily activity profile:****Steps:**

1. Divide students into groups of girls and boys.
2. Distribute large pieces of paper, pencils, and rulers to students.
3. Ask each group of students draw a straight line on the ground or paper.
2. Make marks on the line that represent each hour of a twenty-four hour period.
4. Sub-divide the time line into activities by hour or by morning, afternoon and evening or by times when activities change.
5. In each group ask the students to identify the daily activities for the girls and boys. Place symbols, or draw pictures or write words that represent the different daily activities along the time line at the time when they complete these activities. (If the time line is drawn on the ground either use locally available materials to represent the activities or locally available materials to represent them. For time lines drawn on paper you can draw symbols, use materials or write the name of the activity on the time line.)
6. After the time line is drawn, the teachers and students discuss ways that they might be able to free up time to allow girls more study and homework time.
7. Determine the amount of time that girls and boys spend doing different kinds of activities such as domestic chores, personal items, play, school chores, eat, study, do homework, etc.
8. Compare the gender-differentiated amount of time that girls do chores against the amount of time that boys do chores; the amount of time that girls have to study and do homework and the amount of time that boys have to study and do homework; and the amount of time that girls have to sleep compared

to that of boys.

**Hint:** *It is more likely that hidden time will be identified at school rather than at home. This exercise helps teachers to see all the different tasks that are placed on girls. Although teachers are limited in their ability to address unequal chore obligations that exist between girls and boys at home, they can address inequities that exist at school.*

Probing questions that can be asked to help students identify activities

*What time do you wake up in the morning?*

*What are the kinds of things, work or activities you do in the morning before school?*

*What time does school start?*

*When do you arrive at school?*

*Before class begins, what kinds of activities are you engaged in?*

*How is your time spent in the afternoon at home? And so on.*

The process continues until students have identified all the possible activities, (chores, errands, personal activities) that they engaged in a 24 hour period. An example of the blocks of time that students might list include the ones identified.

**Hint:** *Asking students to create a separate time line for the time spent in school allows for a more detailed discussion of things that occur in the classroom*

### **Chores**

*farming chores  
marketing  
gathering wood  
fetching water  
washing dishes  
babysitting  
running errands  
building houses  
cleaning latrines*

### **Personal**

*bathing  
eating  
playing  
sleeping  
studying  
homework  
watching TV/  
listening to radio*

### **Cleaning**

*sweeping classrooms  
sweeping school compound  
cleaning latrines  
running errands  
clerical work  
cleaning blackboard*

### **Using the information:**

# Note gender differences in workload.

# Note differences in how boys and girls spend time at school. What are the differences in the

kinds of chores that they do at school and at what times they complete these?

- # What are the difference in wealth—some students do not do as much domestic/clerical work as others. Try and find out why there are these differences. For instance, it may be because they have maids at home. (This provides time to focus more on school work).
- # What are the differences in daily patterns such as for sleeping, eating, and playing, doing homework, and studying? How much difference in time is there between what girls spend doing chores and what boys spend doing chores?
- # What are the patterns in work loads, and overlapping job responsibilities?

***Hint:*** A daily activity profile may reveal that girls have a longer school day than boys, due to the fact that girls come to school earlier to do cleaning tasks such as sweeping the school classroom and compounds, washing windows, and working in school gardens before classes begins. They may also clean latrines after school before

# Where might there be hidden time for girls to spend on homework or studying?

### Example of daily activity profile:

		4:30	5:00	5:30	6:00	6:30	7:00	1:30	2:00	3:00	4:00	5:00	6:00	7:00	8:00	8:30	9:00	9:30
rural	boys					⇒# ⇒	⇒	⇒	⇒	⇒								
	girls			"	⇒	#⇒	#⇒	# "	# "						"		"	
urban	girls			#	#⇒	⇒#	#⇒	#			 ⇒	"	"					
urban	boys					⇒⇒	⇒#		⇒			⇒						
	girls			"	"	⇒#	#	#					"					
urban	girls			"		#⇒	#	"						"				

### KEY:

school chores #  
cooking "  
domestic chores  
farming

marketing |  
collecting firewood  
carrying water  
babysitting

construction  
errands  
playing  
bathing



madressas  
studying  
wake up  
go to bed

go to school  
eating



## **Activity: Transect Walk**

**Time: 40 minutes**

A transect walk is an organized walk that students and teachers take through classrooms and the school compound. During the “walk” they observe, ask questions, listen, and identify problems. When the walk is completed, they discuss ways to address identified problems. The school environment and physical plant can be used to create a transect map. Factors identified that affect teaching and student learning should be highlighted to facilitate the discussion.

### **What information a transect walk can highlight:**

- # The layout of the school physical plant;
- # The condition of the school; and
- # Items that influence students learning and participation in school.

### **How to do a transect walk:**

#### **Steps**

1. Create different kinds of groups of students to participate in the transect walk. Groups can be formed by gender, age, or by grade level. Limit groups to 6-8 students.
2. Walk around the school, observing, questioning, and discussing the conditions.
4. Draw a map of the things that were noted on the walk.

### **Materials needed:**

- # Papers, pencils, rulers, erasers

### **Using the information:**

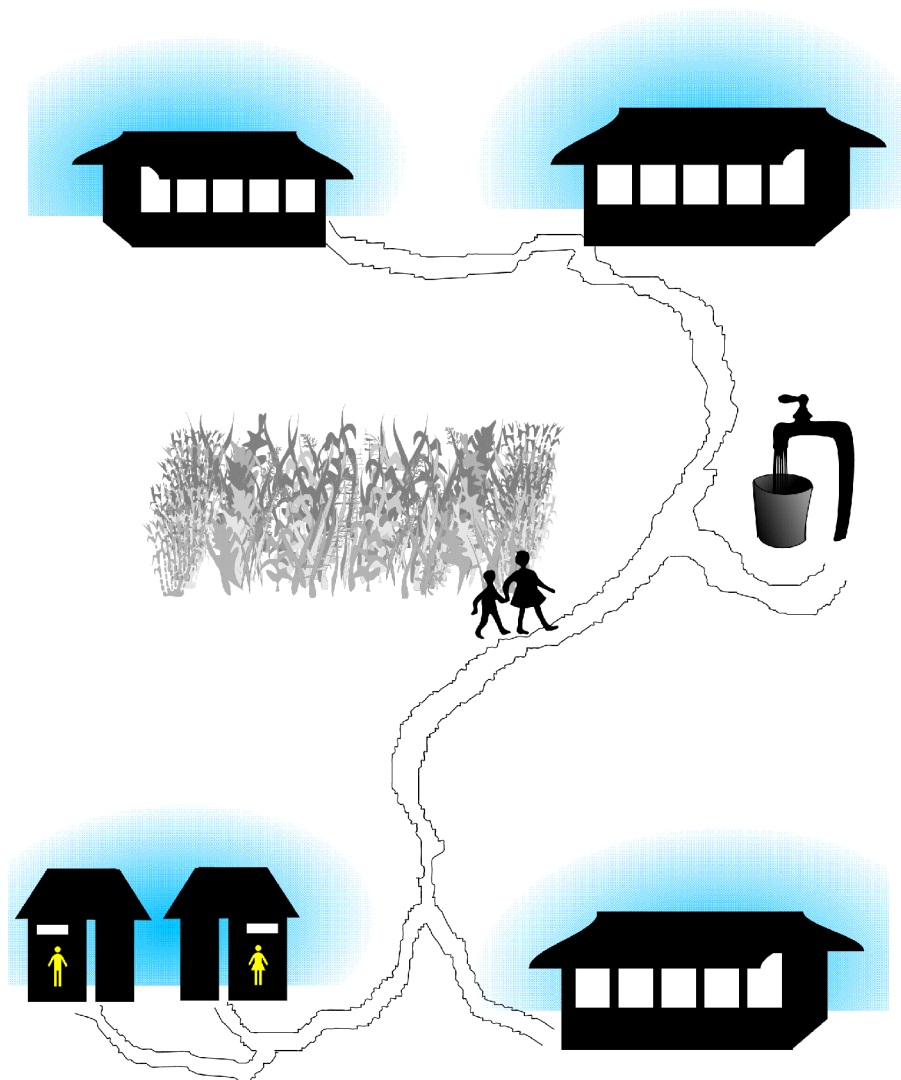
1. If there are no latrines, where do the girls go to use the bathroom? Is the area secure? What measures can be taken to make certain that girls are safe when they use the bathroom?
2. If there are latrines but there is an insufficient number or they are in poor, unsanitary condition, what do students use instead?
3. Do boys and girls use the same latrines? If so, what kinds of behaviors go on when the girls are using the latrines?
4. Are villagers allowed on the school compound? Are there men who hang around the school?
5. If there is no water, where do the students have to go to fetch water? Is the path secure?
6. If there are no security fences, what prevents outside distractions or outsiders from coming onto the school grounds? What prevents younger students from wandering off?
7. Are there differences in the condition of different classrooms? Do some classrooms have better materials/supplies, more chairs or desks?

8. Are the conditions of the school dangerous to the students, e.g, broken glass, dangling roofing sheets, choppy cement floors, snakes, or biting insects, etc?

**Hints:** *Have more than one group take part in this activity and compare their maps. Interesting differences may emerge as probing questions are asked.*

*Pick a time when the rest of the school is in session to do a transect walk. This helps avoid drawing a group of curious students, which can create distractions.*

**Example of a transect walk map:**



## **Activity: Causal Diagrams**

**Time: 1 hour; may require more or less depending on topic**

Causal diagrams are used to identify and analyze the impact of specific events such as corporal punishment, harassment, teasing, pregnancy, or abuse. After problems are identified, interventions can be discussed.

### **What information from casual diagrams can be used to highlight:**

- # Factors affecting student participation and learning in the classroom.
- # Perceptions students have of their teachers and how they affect their performance.
- # Problems caused by poor facilities and infrastructure, what factors contribute to the problems, and what can be done about them.
- # How lack of water in school affects learning.
- # Reasons for high absenteeism and tardiness.
- # Causes/consequences of physical, emotional, and sexual abuse as well as possible solutions.

### **How to make a causal diagram:**

A large circle is drawn in the center of a page. The issue to be discussed is written in the center of the circle. An example of an issue might be “Factors that influence girls’ participation in science classes.” Students identify factors that influence that particular issue. Their responses are written in smaller circles that connect to the larger circle in which the issue has been written. Factors that both positively and negatively influence the issue are identified. Solutions to the problems or issues emerge through this process.

### **Steps**

1. Divide students into groups separated by gender.
2. Distribute paper and pencils to each group if the exercise is drawn on paper. If the exercise will be done on the floor distribute chalk to each group.
3. Draw a circle in the center of the paper or in the space on the floor where the exercise will be conducted. In the circle write the issue.
4. Ask students to identify factors that affect the issue. In smaller circles extending from the center circle, write down the factors that the students identify.
5. Connect the smaller circles to the larger “issue circle” with lines.
6. Place a + or – next to each circle to indicate a positive or negative relationship.
7. As factors emerge, discuss possible solutions.

***Hint:*** Have boys and girls complete this activity separately. That allows you to compare what their perceptions of causal factors are. Stereotypes can then emerge and become part of the discussion.

**Materials needed:**

- # Most materials can be used, depending on the circumstances.
- # It is best to use materials that are easily changeable such as paper and pencils, chalks, and soft ground.
- # Students may prefer to write on paper since they are comfortable with it.

**Using the information:**

- # When a teacher asks a question in class do you feel that you raise your hand all the time, some of the time, or not at all? Why or why not?
- # When you know the answer to a question do you always raise your hand? Why or why not?
- # Who do you think speaks more in class—girls or boys?
- # Do you feel that you get enough attention from your teacher?
- # What other problems can you think of that might affect the way you learn or behave in the classroom?
- # When you don't have textbooks or exercise books how does this affect your participation in class?
- # How does not having tables and chairs or desks affect your participation?
- # What are possible solutions to each of the problems that are identified?

**Example of a Causal Diagram:**

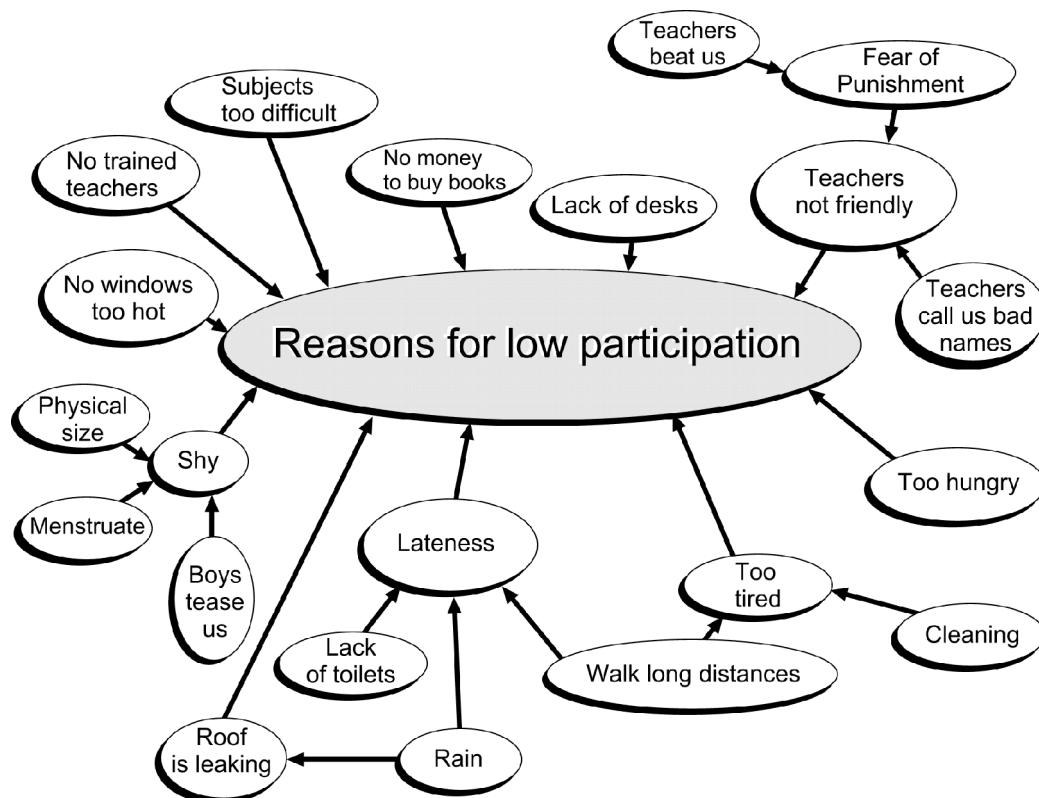
### Activity: Pie Chart

Time: 40 minutes

Pie charts allow analysis of the relationships between activities. For instance, students can determine what proportion of their school day is spent on reading, playing, or cleaning. The pie or circle is divided into segments that represent the importance of the particular elements or activities that have been identified.

#### What information from a pie chart can highlight:

- # Pie charts can help students determine their different activities and the amount of time spent doing those activities. For example, different chores that students identified in primary school can include in-class learning, running errands for teachers, sweeping the classrooms and school compound, cleaning the latrines, washing windows, cutting grass, and fetching water.
- # They can be used to determine wealth, by charting the percentage of students who have materials, school supplies, books, uniforms, shoes, money for lunch, or school bags.



#### How to make a pie chart:

### Steps

1. Divide students into groups of boys and girls.
2. Ask students to identify the different activities performed during school day or identify the different articles of “wealth” (shoes, school supplies, etc.)
3. Draw a circle on paper or on the floor with chalk or beans.
4. Divide the pie based on the percentage of time spend doing activities or the portion of students who have the different articles of wealth.

***Hint:*** For students unfamiliar with the concept of proportion and percentages, it is possible to make this process easier by saying, “Out of 100 stones, how many represent the amount of time girls spend cleaning around the school compound or doing gardening?” The stones can be divided to represent all the possible chores and activities students conduct in schools.

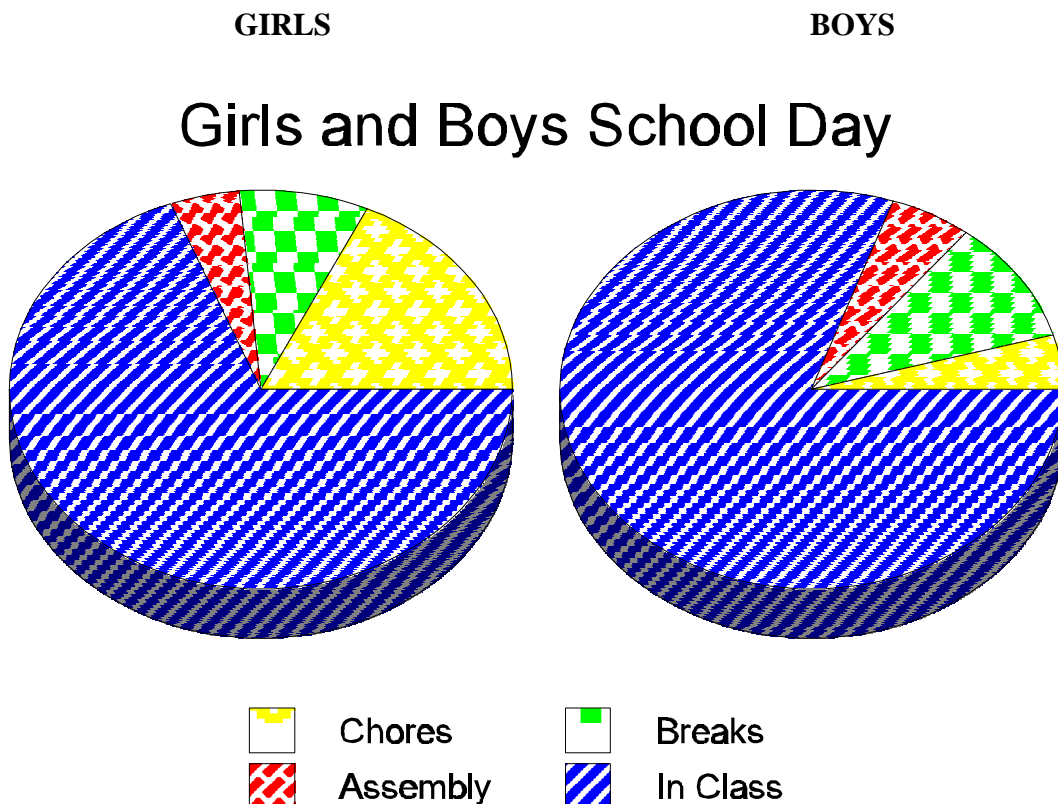
### Materials needed:

- # Paper, pencils.
- # Erasers, compass, rulers.
- # Beans, seeds or stones are needed if pie chart is to be drawn on the ground. A circle of beans is created that can be divided and redivided

### Using the information:

- # When classes start in the morning?
- # What kinds of things do students do at school before classes start?
- # Who dusts the blackboard: girls, boys, whomever the teacher calls on?
- # In class, who distributes exercise books: girls, boys, or the teacher?
- # Who goes to the headmistress/master's office to collect books and supplies? Girls or boys?
- # How many breaks do you have during the day?
- # What do you do during break period? Play, eat, or work?
- # Do you clean after school before going home? If so, what? For how long?
- # Look for differences in the amount of time boys and girls spend doing chores.
- # What are the gender differentiated patterns?
- # Is it the case that girls always do much more domestic/clerical work in school, or is there a shared responsibility?

### Example of a pie chart:



## **Activity: Criteria Matrix**

**Time: 35 minutes**

A criteria matrix is a matrix that allows teachers and students to identify and rank lists of criteria for certain elements. For instance, students can identify the five most important subjects to them, and establish criteria for their importance.

### **A Criteria Matrix can be used to highlight:**

- # Reasons why certain tasks are assigned to girls rather than boys.
- # Reasons for preference of subjects.
- # Why subjects have greater or lesser importance.
- # Why students work harder in certain subjects.

### **How to do a Criteria Matrix:**

To complete a criteria matrix, students list subjects and classes on the top of the matrix and the criteria on which they are judged down the side. Each subject or issue is evaluated on the basis of the criteria that have been identified. For example, health education class could be discussed in terms of the criteria: Is it an easy subject? Does it generate active participation among girls and boys? Is it important to learn? Can it help one get a job later in life? Are students shy about the subject matter? Are girls teased more in this class? Students rank the subjects by placing seeds or marks on the criteria for each subject based on the strongest to the weakest preference in each criteria.

### **Steps**

1. Divide students into group.
2. Chose 5 or 6 issues to discuss.
3. Elicit criteria to rank the issue. Examples of probing questions include:  
What is good about each subject? What else?  
What is bad about each subject? What else?
4. Draw the matrix with subjects across the top and criteria listed on the side.
5. Ask students to rank the subjects with five being the best and one the worst.

### **Materials needed:**

- # If the matrix is drawn on the ground, local materials such as stones, empty tins, nuts, seeds, or leaves can be used to stand for criteria and subjects. A pupil should be made responsible for writing on paper what is drawn on the ground. The facilitator needs to ensure that all students participate.
- # Large size paper, pencils, color pencils, pens, ruler, markers.

### **Using the information:**

- # What is good about each subject? What is bad about each subject?
- # Which subjects are harder for girls? Why?

- # Which subjects do girls hesitate to participate in? Why?
- # Which subjects do girls do well in? Why?
- # Which subjects do girls need to get a well paying job after school?
- # Which subjects do girls need to be a good mother or wife?
- # Which subjects do boys need more than girls? Why?

**Example of a criteria matrix:**

Criteria	English	Math	Health Education	Science	Agricultural Science	Religious Education
Easy	• • • • •					• • • • •
Do well in class	• • • • •				• • • •	
Active in class	• • •			• • • • • • •		
Quiet in class			• • • • • •			• • • •
Difficult		• • • • • • •		• • •		
Job				• •		• • • • • • • •
Important			• • •	• •	• •	• • • • •
Lots of Money					• • • • • •	• • • •
Business					• • • • • • •	
Score	13	7	9	14	18	26
Rank	D	F	E	C	B	A

**Activity: Problem/Solution Matrix****Time: 50 minutes**

A problem/solution matrix is useful to identify things that affect teaching and learning and to then discuss ways to respond to the problems identified. For example, teachers and/or students can discuss how lack of furniture affects learning and what to do about it.

**What information from a problem/solution matrix can highlight:**

- # To identify problems and factors that affect the learning experiences of girls.
- # To determine the problems and causes of sexual harassment and abuse and to identify possible solutions to these problems.
- # To determine what problems are caused by lack of security fences, latrines, farming equipment, and water, and discuss how they affect students' (especially girls' ) participation, performance, and attendance.

**How to do a problem/solution matrix:**

The method involves drawing a grid and writing the problems down one side and the solutions across the top. Students and teachers discuss and identify the most important problems that affect their learning and come up with possible solutions. The problems are then ranked against the solutions to see which carry more weight for solving that particular problem. This is done by allocating ten seeds to each problem. Based on the discussions the seeds are distributed to the various solutions with the greater number of seeds going to the solution that will probably be more effective in resolving the problem. For example, girls might identify pregnancy as a major problem for dropping out of school. Possible solutions that could be identified include forming a girls club to meet and discuss how to protect themselves from getting pregnant, or to distribute condoms or birth control pills in schools, or to practice abstinence. The ten seeds would be distributed among the solutions. If girls think that using contraception is the most important solution, they may give six seeds to that solution, and the remaining four seeds to the other two solutions. The process continues until all the problems/solutions identified are weighted.

**Steps**

1. Divide students into groups of girls and boys.
2. Distribute paper, pencil, chalk if drawn on classroom floors; sticks if drawn on the ground.
3. Ask students to identify problems and solutions.
4. Ask students to draw lines and fill in the information.
5. If drawn on the ground, local objects are used as symbols e.g. a big stone can represent one problem, leaves can represent another, and so on. The same process is repeated for solutions.
6. Students rank their problems/solutions

**Materials needed:**

- # Paper
- # Pencils, markers
- # Any local object found lying around and seeds, beads can be bought at the local market.

**Using the information:**

- # What are the problems associated with the lack of latrines? Water? Desks/tables and benches/chairs?
- # What are the problems associated from the lack of instructional materials? Textbooks?
- # What are the problems of abuse and harassment that girls face in the classroom?
- # How does interaction between girls and the teachers affect their performance?
- # How does interaction between the girls and the boys affect their performance?
- # How do school chores affect girls' participation?
- # What affect does home chores/ responsibilities have on girls' participation?
- # How does the distances students walk to school affect their attendance? Tardiness? Performance?
- # What impact does corporal punishment have on the learning of girls? Boys?

**Example of a Problem/Solution Matrix:**

## Activity: Venn Diagram

Time: 60 minutes

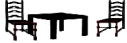




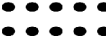
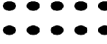













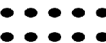


A Venn diagram shows the extent of the interaction between and among head teachers, teachers, girls, and boys. Discussion about the nature of the interaction can be noted.

### Information Venn diagrams can highlight:

- # the amount of interaction in the classroom that takes place between the students, and between the students and teachers;
- # reasons for the different interaction patterns;
- # roles teachers and head teachers have in the lives of students;
- # how students perceive their teachers; and
- # the level of communication and support between head teachers and teacher.

### How to make a Venn Diagram:

A Venn diagram is made by drawing circles that represent the different groups or people—head teachers, teachers, boys, and girls. The amount of overlap between the different circles represents the interaction or power relationship that exists between the various groups represented by the

Problems	Solutions			Effects that Problems have on Learning
	Donor Agencies	Governments	Community Self Help Groups	
Lack of Classroom Furniture 				Low participation, high absenteeism, and excess tiredness because pupils are constantly looking up to the teacher and straining their neck.
Lack of Textbooks and Teaching Materials 				Performance is low, especially for girls who are less likely to have private tutors after school. Pupils cannot study or do their homework.
Lack of Security Fences 				Younger pupils wonder off and older pupils are sent to find them, causing lateness. Fear of girls getting accosted and abused. Thieves break in and steal school supplies.
Long distance from School 				Pupils are tired by the time they arrive at school. Fear of undwed pregnancy causes early marriage. Parents fear that older men attract girls with money and gifts.
Lack of Latrines 				Pupils walk to the nearest bush. This is unsafe for fear of girls being accosted by strange men lurking around the school. Unsanitary; pupils don't have access to water.
Lack of Libraries 				Deters the learning and research process for both pupils and teachers.

individual circles. If we want to know the level of interaction between teachers and girls in the classroom, two circles are drawn to represent the two groups. If they have limited interaction, the circles will overlap a tiny bit. If they have considerable interaction, the circles will almost completely cover each other. Each group draws their circles and then compares them to those the other groups have drawn.

### **Steps**

1. Divide students into groups of boys and girls.
2. Distribute paper.
3. Ask students to identify groups in the class or school environment that they interact with and rank their level of interaction.
4. Ask students to identify the degree of contact and overlap between different groups.
5. Cut out or draw circles to represent each individual.
6. Arrange the circles as follows:
  - separate circles—no contact
  - touching circles—information passes between individuals
  - small overlap—minimal interaction or cooperation
  - large overlap—considerable interaction

### **Materials needed:**

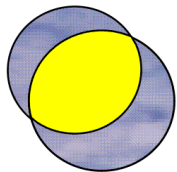
- # Circles made from cardboard or drawn on paper.
- # Scissors, large size paper.
- # Pencils, erasers, markers, etc.

### **Using the information:**

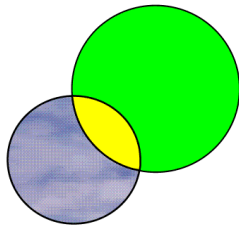
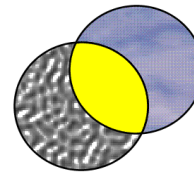
- # Whom does the teacher interact with more in class?
- # What is the nature of the interaction with girls? Positive? Negative?
- # Whom do girls interact with most in the classroom?
- # What is the amount of interaction between boys and girls? What is the nature of their interaction?
- # Who interacts more with the head teacher? What is the nature of the interaction?

### **Example of a Venn diagram:**

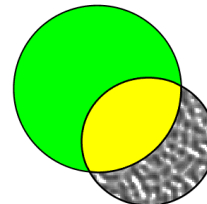
Girls interact more with other girls for support. They frequently borrow pencils, erasers, pens, and share food and textbooks from each other. Additionally, teachers make them sit together.



Minimal interaction, mostly negative. Girls say: "Boys are bad, they tease us, embarrass us and laugh at us. They think we are stupid and lazy. Teachers sometimes let them tease us".



Girls say: "We are afraid of teachers, they punish us more than boys. We fear them a lot. We run their errands".



Teachers favor boys and help them more in their school work. Girls say: "They help us too, but they are much nicer to boys".

**Activity: Card Sort****Time: one class period**

A card sort ranks cards with words or drawings that represent certain ideas and concepts. (See drawings of chores and occupations that can be used for card sort activity in the annex.) Teachers and students can discuss how gender stereotypes influence the kinds of chores that girls are expected to do as well as the kinds of occupations they are expected to pursue.

**What information card sorts can highlight:**

- # words that teachers use to describe girls and boys. Lists that girls make and boys make can be compared;
- # drawings identifying different chores can be written or drawn and ranked by the students by whether a boy or girl would be expected to do this task;
- # different occupations that girls or boys could pursue;

**How to do a card sort:****Steps**

1. Separate into groups of girls and boys.
2. Ask students to sort cards or make two lists of words that teachers use to describe girls and boys. Teachers can be asked to sort cards with words that describe student behavior. They can identify whether the words describe a boy or a girl.
3. The lists should be compared to see how gender defines the perceptions and attitudes of teachers and students.

**Materials Needed:**

- # Papers or five by eight cards.
- # Scissors, pens, pencils, color pencils.
- # Seeds, stones, beads, nuts, etc.

**Using the information:**

- # Categorize the kinds of words that teachers use to describe girls and boys? Are they negative or positive? Do they send messages about high or low expectations for the students?
- # What are the perceptions that girls have about themselves?
- # Do the jobs that girls project for themselves represent predominantly the gender division of labor in the society at large?
- # Do the words that boys use to describe girls contain negative stereotypes, threats, sexual innuendos, abusive language, or demeaning imagery.

## Examples of card sorts:

<u>Girls</u>		<u>Boys</u>	
<i>Shy</i>	<i>Carefree</i>	<i>Interrupt</i>	<i>Disruptive</i>
<i>Playful</i>	<i>Neat</i>	<i>Naughty</i>	<i>Hard-working</i>
<i>Smart</i>	<i>Passive</i>	<i>Courageous</i>	<i>Emotional</i>
<i>Lazy</i>	<i>Slow</i>	<i>Talkative</i>	<i>Clever</i>
<i>Good in local languages</i>		<i>Showoffs</i>	<i>Head is empty</i>
		<i>More likely to ask questions in class</i>	
		<i>Better dressed</i>	

Words that teachers use to describe girls	Occupations boys think girls want to pursue	Occupations girls said they wanted to pursue
<i>witch</i> <i>intelligent</i> <i>clever</i> <i>weak</i> <i>stupid</i>	<i>cook</i> <i>nurse</i> <i>typist</i> <i>secretary</i> <i>air hostess</i> <i>headmistress</i> <i>policewoman</i> <i>storekeeper</i> <i>teacher</i> <i>person who collects firewood</i>	<i>nurse</i> <i>air hostess</i> <i>secretary</i> <i>typist</i> <i>teacher</i> <i>seamstress</i> <i>cook</i> <i>business person</i> <i>wife of a president</i>

**Hint:** Teachers and students can be asked to sort beans to determine whom the teacher calls on more—girls or boys. Each student is given ten beans. Each time their name is called they move a bean from one pile to another. At the end of the class period students tally the beans that were used. Or a teacher can have two different-colored piles of beans. Each time a boy is called a student moves a “boy” bean to a different pile; each time a girl is called the student moves a “girl” bean into the pile. At the end of class the teacher can tally how many times she calls on boys compared with girls.



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